capacity of the kidney improves. Repair in these animals leads to the development of a chronic diffuse type of nephropathy in which the acid-base equilibrium of the blood may be maintained at the point of normality.

HYGIENE AND PUBLIC HEALTH

UNDER THE CHARGE OF
MILTON J. ROSENAU, M.D.,
PROFESSOR OF PREVENTIVE MEDICINE AND HYGIENE, HARVARD MEDICAL SCHOOL, BOSTON, MASSACHUSETTS,
AND
GEORGE W. McCOY, M.D.,
DIRECTOR OF HYGIENIC LABORATORY, UNITED STATES PUBLIC HEALTH SERVICE, WASHINGTON, D. C.

Narcotic Drug Addiction as Regulated by a State Department of Health.—Blair (*Jour. Am. Med. Assn.*, 1919, vol. lxxii, 1441), believes that after sufficient administrative machinery, both federal and state, is developed, the importation and sale of all habit-inducing drugs should be made a government monopoly; that it should be unlawful for any physician to prescribe or dispense any of these drugs in any but the accepted therapeutic dosage under any conditions or to buy or possess them in quantity greater than the legitimate therapeutic needs of his own or institutional practice fully justifies; that pharmacists be prohibited from selling them in any quantity whatsoever, and he be allowed to fill no prescription calling for more than the usual therapeutic dosage; and that no ready-made or proprietary product carrying any narcotic whatever be allowed to be sold. He would have an official, not in medical, pharmaceutical or dental practice, in every district to whom every particle of the government supply for the district should be sent. It would be his duty to estimate the legitimate needs of all professional people and to supply them so much and no more, except in time of public emergency or unusual circumstances. To him should be reported every addict in the district, even inoperable surgical cases, as well as all persons requiring on the testimony of a physician, doses in excess of the usual; and this official would supply to these persons such amounts as would appear necessary, humanely caring for the addicts already made, but sternly refusing to supply new ones except those with diseases which positively demand large doses. This plan would yield definite results and would relieve the physician of an unwelcome class of work that, in the nature of the case, he cannot handle well. Perhaps there would be much medical objection at first, but the plan would probably work so well that the profession at large would soon come to support it most enthusiastically. Certainly it would relieve the profession of a great amount of narcotic bookkeeping and reports, and would control the problem much better than does any existing plan.

Etiology of Yellow Fever.—Noguchi (*Jour. Exp. Med.*, 1919, xxix, 547) states that the clinical and pathological features of the yellow fever prevalent in Guayaquil conform with those described by other investigators of this disease as it has occurred elsewhere, both epidemically and endemically. By injecting into guinea-pigs the blood of yellow fever cases occurring in Guayaquil a group of symptoms and lesions closely resembling those observed in human yellow fever were induced in a limited number of instances. Of 74 guinea-pigs inoculated with specimens of blood from 27 cases of yellow fever, 8, representing 6 cases, came down with the symptoms. In the blood, liver and kidneys a minute organism was demonstrated which closely resembles in morphology the causative agent of infectious jaundice (Leptospira icterohemorrhagiæ). The leptospira transmitted from yellow fever cases to guinea-pigs was found to induce similar symptoms and lesions upon further passage into normal guinea-pigs. The leptospira obtained from cases of yellow fever has been given the provisional name of Leptospira icteroides. Noguchi reports studies on the type of disease induced in guinea-pigs, dogs and monkeys by inoculating them (1) with the blood or organ emulsions of guinea-pigs or other susceptible animals experimentally infected with Leptospira icteroides, and (2) with a pure culture of the organisms. The symptoms and pathological lesions induced in guinea-pigs are much more pronounced than those observed in dogs or marmosets. The period of incubation is nearly the same in all three species, seventy-two to ninety-six hours with intraperitoneal or subcutaneous inoculation, and a day or more longer when the infection is induced percutaneously or *per os*. The symptoms and lesions observed in animals experimentally infected with Leptospira icteroides closely parallel those of human yellow fever. The pathological changes occurring in human cases of yellow fever are similar to those induced by inoculation in guinea-pigs and marmosets and in respect to their intensity stand intermediate between those arising in the two animals mentioned.

Experiments on the Mode of Infection in Epidemic Meningitis.—Amoss and Eberson (*Jour. Exp. Med.*, 1919, xxix, 605) state that the lower monkeys as represented by Macacus rhesus are resistant to a high degree to infection with cultures of the meningococcus introduced into the general blood. The lower monkeys are less resistant to infection when the meningococcus cultures are injected directly into the subarachnoid space by lumbar puncture. Relatively virulent cultures, which have been passed through several monkeys, acquire the power of surviving in the circulating blood of the monkeys for a maximum period of about seventy-two hours. Nothing has, however, been observed to indicate that the injected meningococci actually multiply in the blood. It has not been found possible to direct the meningococci circulating in the blood into the cerebrospinal meninges of monkeys. In this effort an aseptic meningitis was induced by injecting horse serum, saline solution, or protargol into the subarachnoid space preceding the introduction of the meningococci into the blood. In rabbits the meningococci were able to pass into the spinal fluid from the blood when a physical break in the continuity was made; however, under the conditions of chemical inflammation of the meninges the rabbit reacted just as the monkeys, and the organisms did not pass. Because of the high insusceptibility of the monkey to infection with meningococcus it is not believed that the experiments throw any new light on the mode of invasion of the body in man by that microörganism. The experiments do not lend any support to the notion that an intraspinal injection of the antimeningococcus serum, early in the course of invasion of meningococcus in man, and possibly at a period at which the meninges do not yet show evidences of inflammation, favor its diversion from the blood stream into the subarachnoid space.

The Effect of Diet on the Healing of Wounds.—CLARK (*Johns Hopkins Hosp. Bull.*, 1919, xxx) states that the length of the quiescent period of wound healing is affected by the diet. It varies from zero in protein-fed dogs to six days in the fat-fed animals. This variation in the quiescent period is more marked in smaller wounds. As a consequence, the date of final healing differs by about five days for the protein- and fat-fed dogs. When the second period, or period of contraction, has set in the rate of contraction is not affected by the diet. It is governed by a variable factor depending on the age of the wound and by a constant factor proportional to the original size—$\frac{R_1}{R_2}=\frac{S_1}{S_2}$ when R_1 and R_2 = rates of healing of large and small wounds and S_1 and S_2 = original areas of these wounds. The beginning of Period III, the period of epidermization, is independent of the size of the wound and the diet. It is determined by the age of the wound. Contraction and epidermization continue together until the wound is entirely healed. After the wound is healed the scar continues to contract until pigmentation sets in. During this latter process it enlarges and reaches a stationary state after pigmentation is complete.

Notice to Contributors.—All communications intended for insertion in the Original Department of this JOURNAL are received only *with the distinct understanding that they are contributed exclusively to this* JOURNAL.

Contributions from abroad written in a foreign language, if on examination they are found desirable for this JOURNAL, will be translated at its expense.

A limited number of reprints in pamphlet form, if desired, will be furnished to authors, *providing the request for them be written on the manuscript.*

All communications should be addressed to—

DR. GEORGE MORRIS PIERSOL, 1913 Spruce St., Philadelphia, Pa., U.S.A.